

Form PTO-1449 (Modified)

Atty. Docket No.
1856-32201

Serial No.
10/807,851

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)

Applicant
Yi Jiang et al.

Filing Date
March 24, 2004

Group
1764

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation
							YES NO

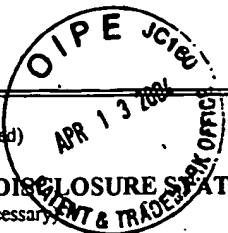
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>BA</i>	BA	PCT SEARCH REPORT IN PCT/US04/08938 dated March 17, 2005 (2 pp.)

EXAMINER Jennifer Lewy

DATE CONSIDERED 11/17/2005

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



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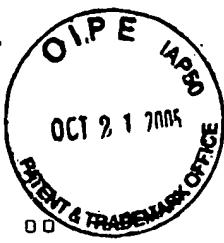
FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation
							YES NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<u>JAL</u>	BA	"Liquid Phase Dispersion In Bubble Columns Operating In The Churn-Turbulent Flow Regime," Chemical Engineering Journal, Vol. 78 (2000), pp. 43-51.
<u>JAL</u>	BB	"Fluid Dynamic Parameters In Bubble Columns With Internals," Chemical Engineering Science, Vol. 54 (1999), pp. 2187-2197.
<u>JAL</u>	BC	Bubble Column Reactors And Fischer-Tropsch Synthesis, 1995, pp. 228-309

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EF238496531US

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Substitute for form 1449A/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/807,851
				Filing Date	March 24, 2004
				First Named Inventor	Yi Jiang et al.
				Group Art Unit	1621
				Examiner Name	Jafar F. Parsa
Sheet	1	of	3	Attorney Docket Number	1856-32201 (9422.0-01)

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
JPL	AA	US-5384336	01-24-1995	Koros	—
JPL	AB	US-6825237	11-30-2004	Schweitzer et al.	—
JPL	AC	US-2139943	12-13-1938	Fenske et al.	—
JPL	AD	US-2395777	02-26-1946	Brunjes et al.	—
JPL	AE	US-2986454	05-30-1961	Jewett	—
JPL	AF	US-3230055	01-18-1966	Wolfrom	—
JPL	AG	US-4702891	10-27-1987	Li et al.	—
JPL	AH	US-6914083	07-05-2005	Hensman	—
JPL	AI	US-4313848	02-02-1982	Scott	—
JPL	AJ	US-5827902	10-27-1998	Maretto & Piccolo	—
JPL	AK	US-6201031	03-13-2001	Steynberg et al	—
JPL	AL	US- 5268344	12-07-1993	Pedrick et al	—
—	—	—	—	—	—

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			
JPL	AM	WO 99/00191	01-07-1999	Maretto et al	—
JPL	AN	GB- 2358816 A	08-08-2001	Bowe & Stairmand	—

Examiner Signature	Jennifer Leung	Date Considered	11/17/2005
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/807,851
(use as many sheets as necessary)				Filing Date	March 24, 2004
				First Named Inventor	Yi Jiang et al.
				Group Art Unit	1621
				Examiner Name	Jafar F. Parsa
Sheet	2	of	3	Attorney Docket Number	1856-32201 (9422.0-01)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.		T ²
<i>JPL</i>	BA	MARETTO et al, "Design and Optimization of a Multi-Stage Bubble Column Slurry Reactor for Fischer-Tropsch Synthesis," <i>Catalysis Today</i> (March 30, 2001) Vol. 66, Issues 2-4, pp. 241-248		
<i>JPL</i>	BB	URSEANU et al, "A Structured Catalytic Bubble Column Reactor: hydrodynamics and mixing studies", <i>Catalysis Today</i> (Sept. 15, 2001) Vol. 69, Issues 1-4, pp. 105-113		
<i>JPL</i>	BC	DREHER et al, "Liquid-phase Backmixing in Bubble Columns, Structured by the Introduction of Partition Plates", <i>Catalysis Today</i> (Sept. 15, 2001) Vol. 69, Issues 1-4, pp. 165-170		
<i>JPL</i>	BD	FORRET et al, "Influence of Scale on the Hydrodynamics of Bubble Column Reactors: An Experimental Study in Columns of 0.1, 0.4 and 1 m Diameters", <i>Chemical Engineering Science</i> (Feb-March 2003) Vol. 58 , Issues 3-6, pp. 719-724		
<i>JPL</i>	BE	SONG et al, "Multiplicity and Sensitivity Analysis of Fischer-Tropsch Bubble Column Slurry Reactors: Plug-flow Gas and Well-mixed Slurry Model", <i>Chemical Engineering Science</i> (June 2003) Vol. 58, Issue 12, pp. 2759-2766		
<i>JPL</i>	BF	ZHAO et al, "Mass transfer to viscous liquids in bubble columns and air-lift reactors: influence of baffles", <i>Chemical Engineering Science</i> (July 1994) Vol. 49, Issue 14, pp. 2359-2369		
<i>JPL</i>	BG	YANG et al, "Liquid backmixing in bubble columns", <i>Chemical Engineering Science</i> (June 8, 1992) Vol. 47, Issues 9-11, 8 pp. 2859-2864		
<i>JPL</i>	BH	FORRET et al, "Liquid Dispersion in Large Diameter Bubble Columns, with and without Internals", <i>The Canadian Journal of Chemical Engineering</i> (June-August 2003) Vol. 81, pp. 360-366		
<i>JPL</i>	BI	MOLERUS et al, "Hydrodynamics of bubble columns in the liquid circulation regime", <i>Chemical Engineering Science</i> (1986) Vol. 41, Issue 10, pp. 2685-2692		
<i>JPL</i>	BJ	KRISHNA, "A scale-up strategy for a commercial scale bubble column slurry reactor for Fischer-Tropsch synthesis", <i>Oil & Gas Science and Technology</i> (2000), Vol. 55 (Issue 4), pp. 359-393		
<i>JPL</i>	BK	BI et al, "A state-of-the-art review of gas-solid turbulent fluidization", <i>Chemical Engineering Science</i> (Nov. 2000) Vol. 55, Issue 21, pp. 4789-4825		

Examiner Signature	Jennifer Leung	Dated Considered	11/17/2005
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				Group Art Unit	1621
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Sheet	3	of	3	Attorney Docket Number	1856-32201 (9422.0-01)

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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.		T ²
ZJL	BL	SIE et al, "Fundamentals and selection of advanced Fischer-Tropsch reactors", <i>Applied Catalysis A: General</i> (Oct. 4, 1999) Vol. 186, Issues 1-2, pp. 55-70		
ZJL	BM	CHEN et al, "Fluid dynamic parameters in bubble columns with internals", <i>Chemical Engineering Science</i> (July 1999) Vol. 54, Issues 13-14, pp. 2187-2197 <i>Duplicate, See ID S 4/13/04</i>		
ZJL	BN	COLMENARES et al, "Fluid-dynamic experimental study in a bubble column with internals", <i>International Communications in Heat and Mass Transfer</i> (April 2001) Vol. 28, Issue 3, , pp. 389-398		
ZJL	BO	SCHLUTER et al, "Heat transfer in two- and three-phase bubble column reactors with internals", <i>Chemical Engineering and Processing</i> (June 1995) Vol. 34, Issue 3, pp. 157-172		
ZJL	BP	SAXENA et al, "Estimation of gas holdup in a slurry bubble column with internals: nitrogen-Therminol-magnetite system", <i>Powder Technology</i> (1993), Vol. 75, Issue 2, pp. 153-158		
ZJL	BQ	KRISHNA et al, "A Strategy for Scaling Up the Fischer-Tropsch Bubble Column Slurry Reactor", <i>Topics in Catalysis</i> (December 2003), Vol. 26, Issues 1-4, pp. 21-28		

Examiner Signature	Jennifer Leung	Dated Considered	11/17/05
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